

The Status of Breast Cancer in the Commonwealth
Annual Report
Fiscal Years 2010-2011



Presented to the Governor and State Legislature
By
The Kentucky Women's Cancer Screening Program
Division of Women's Health
Department for Public Health
Cabinet for Health and Family Services



The Status of Breast Cancer in the Commonwealth Annual Report

Fiscal Years 2010-2011

This report was prepared by
The Kentucky Women's Cancer Screening Program
Division of Women's Health
Kentucky Department for Public Health
in collaboration with
The Breast Cancer Advisory Committee

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Funding for this project was provided through KRS 214.554 and a Cooperative Agreement
(1/U58/DP000836-02) with the Centers for Disease Control and Prevention,
Division of Cancer Control and Prevention.

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Jane Beshear



My Fellow Kentuckians:

Breast cancer is the second leading cause of cancer deaths among Kentucky women and continues to be a leading public health concern in the Commonwealth. We are committed to utilizing the powerful weapons of awareness, regular screenings and early detection to fight this disease.

The "Annual Report on the Status of Breast Cancer in the Commonwealth for Fiscal Years 2010-2011" demonstrates the results of tremendous efforts by the Kentucky Women's Cancer Screening Program (KWCSPP) in the Kentucky Department for Public Health and its partners. The KWCSPP provides breast and cervical cancer screening services and prompt referrals for treatment to eligible women in the Commonwealth. In FY 2011, more than 11,404 screening mammograms were provided to KWCSPP eligible women. Also in FY 2011, a total of 147 cases of breast cancer were detected through local health departments.

The KWCSPP is vital for improving the health status of women in Kentucky and assisting in the reduction of health disparities. This report illustrates the necessity of this program and highlights the wonderful services it provides. Because of increased screening efforts by the KWCSPP and other health care providers in collaboration with a strong network of community partnerships, women's lives are being saved. My office is proud to support these efforts through **Horses & Hope**, an initiative to deliver breast cancer awareness, education and screening to uninsured or underinsured women working in Kentucky's signature horse industry. For more information on **Horses & Hope**, please visit www.horsesandhope.org.

Thank you for your interest in the health of women in Kentucky. It will be only through shared responsibility and working together that we will truly succeed in continuing to improve the health status of all Kentuckians.

Best Wishes,

A handwritten signature of Jane Beshear in cursive script.

Jane Beshear



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DEPARTMENT FOR PUBLIC HEALTH**

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MESSAGE FROM THE COMMISSIONER

The Kentucky Women's Cancer Screening Program (KWCS), in collaboration with the Breast Cancer Advisory Committee (BCAC), is pleased to present the "Annual Report on the Status of Breast Cancer in the Commonwealth for Fiscal Years 2010-2011". This report provides an overview of the KWCS and a summary of achievements during FY 2011 as well as the burden of breast cancer among women in Kentucky.

Since 1990, a total of 287,119 screening mammograms have been performed through local health departments in Kentucky. During FY 2011, 14,212 screening mammograms were provided through local health departments with 11,404 provided to KWCS eligible women. Additionally, since 2002, the KWCS has referred more than 3,700 patients to the Kentucky Department for Medicaid Services Breast and Cervical Treatment Program for cancer treatment services of the breast or cervix.

In FY 2011, Kentucky was recognized as one of 12 states among 68 states and tribes that met all of the core performance indicators on the quality of breast and cervical cancer services assessed by the Center for Disease Control and Prevention (CDC). This accomplishment has been reached for 12 consecutive submissions.

I would like to express my appreciation to communities and healthcare providers across the Commonwealth for their support in the promotion of breast cancer awareness, screening and prompt referral for treatment of the KWCS patients with breast and cervical cancer. Through screening, early detection, prompt referrals and community outreach initiatives, we can make a tremendous difference in the health and lives of Kentucky's women.

Sincerely,

Stephanie Mayfield Gibson, MD, FCAP
Commissioner
Department for Public Health

Executive Summary

Breast cancer has been a longstanding public health concern in Kentucky. Approximately 590 women die every year from breast cancer in the Commonwealth. To reduce the burden of breast cancer, the Kentucky Women's Cancer Screening Program (KWCSF) has taken steps to emphasize early detection of the disease through public education and outreach activities, screening, diagnostic services and prompt referrals to treatment services while assuring quality and partnering with organizations and individuals around the state.

In 1990, the Kentucky Department for Public Health (DPH) was allotted state general funds for breast cancer screening services performed through local health departments (LHDs). In 1998, the KWCSF received federal funding for additional breast cancer screening services. The KWCSF enrolls uninsured or underinsured women ages 21 to 64 with incomes less than 250% of the federal poverty level. In the 21 years since the program's inception, 287,119 screening mammograms have been provided and 2,177 cases of breast cancer have been detected.

In FY 2011, the KWCSF funded LHDs to provide clinical breast exams (CBEs) to 24,187 women. Mammograms were provided to 11,404 KWCSF-eligible women. These women could not have otherwise afforded to be screened.

The KWCSF made great strides in improving screening rates for the disparate populations through public education and outreach. In FY 2011, the KWCSF recruitment staff collaborated with state partners and 59 local community coalitions to support outreach to women who have never or are rarely screened. Through contracts with the Fayette County Health Department and the University of Louisville Brown Cancer Center, the KWCSF supports special efforts to recruit African American, Hispanic, and other women from disparate populations for breast cancer screenings.

Current data shows the overall breast cancer mortality rate in rural and urban parts of the state are similar, whereas in the past, rural areas had higher mortality rates. The KWCSF is encouraged by this data which reflects successful outreach efforts. Reducing and removing barriers to screening and decreasing racial and geographic disparities will remain a priority for the program.

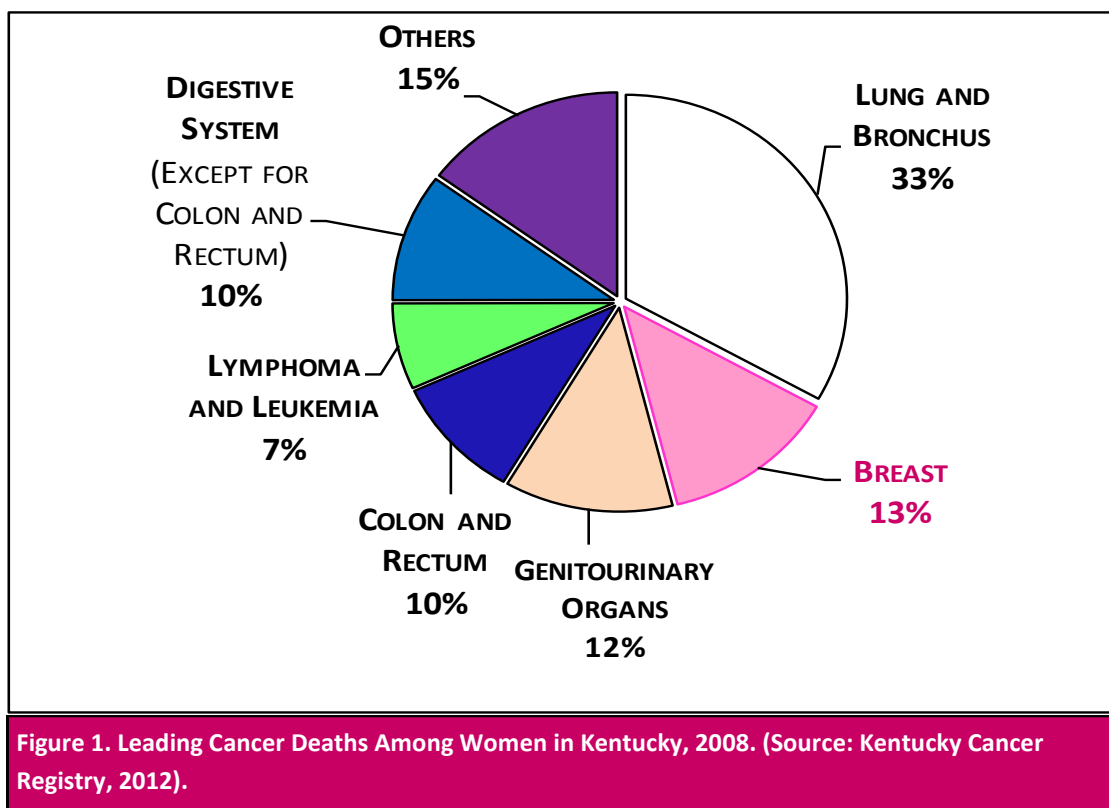
The KWCSF assures the quality of breast cancer screening services and timely referrals for treatment services, an effort that is tracked and monitored by the Centers for Disease Control and Prevention (CDC) report of the program's 11 core performance indicators. Four of the 11 indicators assess quality of breast cancer services. According to the CDC, the KWCSF met or exceeded the CDC standard for all performance indicators for the last six years, making the KWCSF one of the highest quality programs in the country. Quality assurance tools developed

by the KWCSP are now being used as models by other states.

Since 2002, the Kentucky Department for Medicaid Services (DMS) has partnered with the KWCSP to provide treatment to women screened or diagnosed through the KWCSP. The Breast and Cervical Cancer Treatment Program (BCCTP) allows women diagnosed through the KWCSP to access treatment for pre-cancer or cancer of the breast. To date, over 3,700 Kentucky women have benefited from this partnership.

Breast Cancer in Kentucky

Breast cancer is the most commonly diagnosed cancer among American women. According to the American Cancer Society (ACS), American women born today have a 1 in 8 lifetime risk of developing the disease. According to the most recent data available, breast cancer is the second leading cause of cancer deaths among women in Kentucky (Figure 1).



Breast Cancer Incidence

Breast cancer incidence (the rate of new cases of breast cancer) in Kentucky women has declined every year since 2006; however, the U.S. female breast cancer incidence rates increased over the same time period. According to the Surveillance, Epidemiology and End Results (SEER) Program data of the National Cancer Institute (NCI) for the years 2005 to 2009, the five year average age-adjusted female breast cancer incidence rate in Kentucky was 121.2 cases per 100,000 women, lower than the U.S. rate of 122.0 cases per 100,000 women (see Figure 2 for annual data for 2005 to 2009). Refer to Map 1 in Appendix A for invasive breast cancer incidence rates by county.

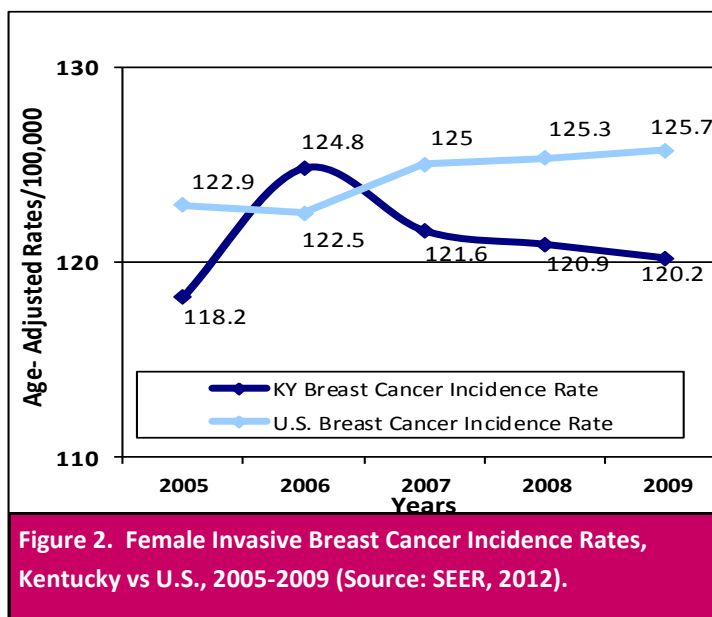
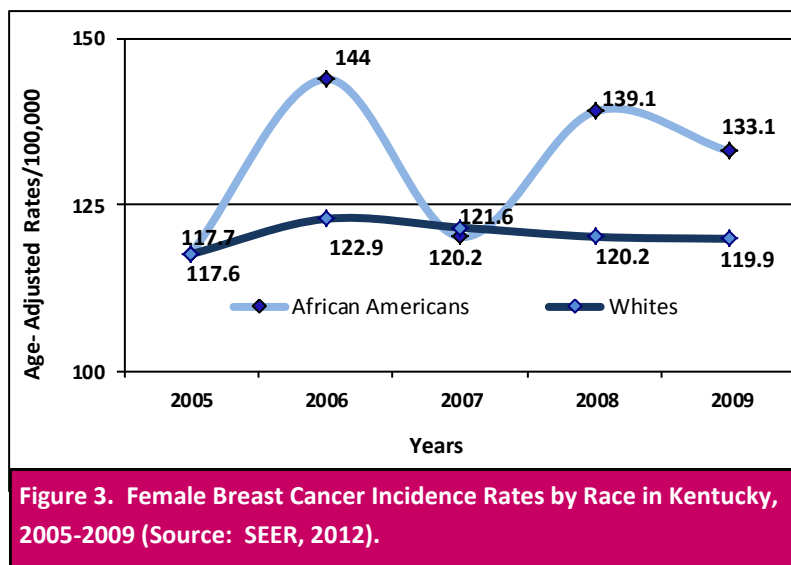
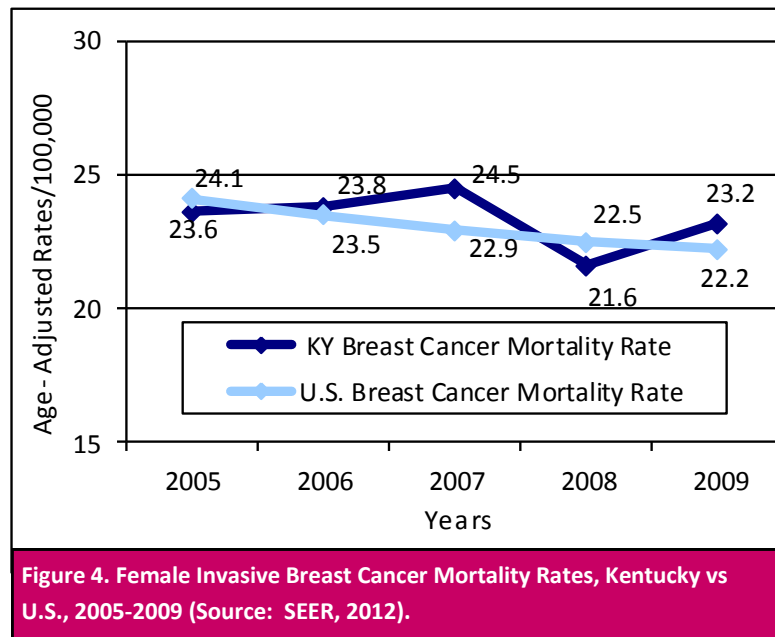


Figure 3 shows the yearly age-adjusted breast cancer incidence rate from 2005 to 2009. The age-adjusted rate for African American women fluctuates from 117.7 per 100,000 women in 2005 to 133.1 per 100,000 women in 2009 while the age-adjusted rate for white women during this time period slightly increased from 117.6 per 100,000 women to 119.9 per 100,000 women. The five year average of these rates from 2005 to 2009 reflects a higher incidence of breast cancer among Non-Hispanic African American women in Kentucky (131.22 cases per 100,000) than among white women (120.54 cases per 100,000).



Breast Cancer Mortality

National studies suggest a higher risk for breast cancer mortality in women with lower household income, less access to healthcare services for screening, diagnosis, and treatment, decreased outreach encounters and later detection of the disease.



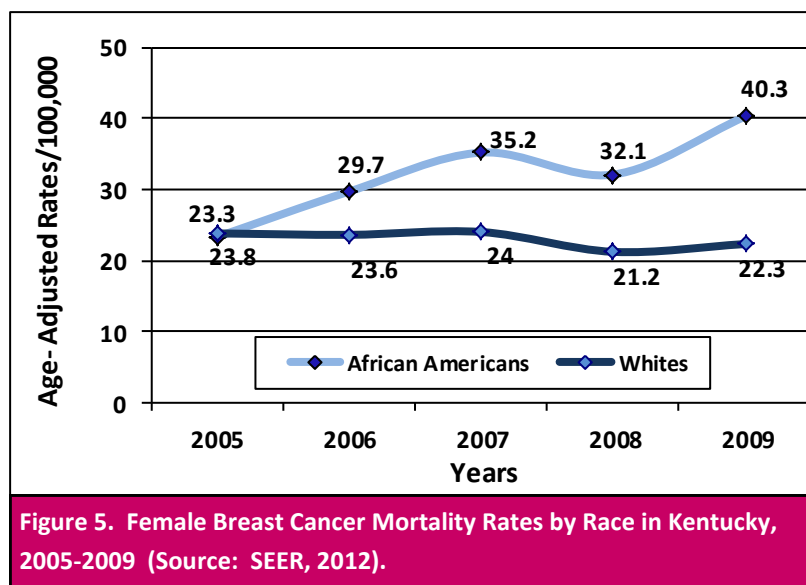
Breast cancer death rates in Kentucky as well as nationally have continued an overall downward trend over the five year period from 2005 to 2009 (Figure 4). In Kentucky, this rate ranged from 23.6 per 100,000 women to 23.2 per 100,000 women with the five year average breast cancer mortality rate during 2005 to 2009 at 23.4 deaths per 100,000 women. This rate was slightly higher than the breast cancer mortality rate in the United States which showed a decline from 24.1 per 100,000 women in 2005 to 22.2 per 100,000 women in 2009 with a five year average of 23.0 deaths per 100,000 women.

The trend in similar mortality rates continued for urban and rural Kentuckian women. From 2004 to 2008, the age-adjusted mortality rate of breast cancer in rural areas of Kentucky (23.36 deaths per 100,000 women) was comparable to the rate in the urban areas of Kentucky (23.52 deaths per 100,000 women).

The most recent data from the Kentucky Cancer Registry (KCR, 2008) revealed 11 counties in Kentucky had age-adjusted mortality rates due to breast cancer more than twice the state average age-adjusted rate (21.6/100,000 women). (See Map 2—Appendix A.) These counties were: Cumberland (60.4/100,000), Carroll (59.3/100,000), Washington (59.2/100,000), Henry (54.6/100,000), Clinton (53.2/100,000), Clay (53.0/100,000), Simpson (52.8/100,000), Hart

(50.0/100,000), Grayson (48.0/100,000) Wayne (48.6/100,000), and Floyd (45.9/100,000). However, the number of deaths due to breast cancer among these counties is too small to calculate a stable age-adjusted rate.

Breast cancer mortality rates vary considerably across racial and ethnic groups in Kentucky as they do in the United States. African American women continue to die of breast cancer at a higher rate than any other racial or ethnic group, suggesting racial and ethnic disparities exist in Kentucky. The average annual age-adjusted breast cancer mortality rate in Kentucky from 2005-2009 was 23 cases per 100,000 white women and 32.1 cases per 100,000 African American women . Figure 5 shows the annual rates of breast cancer mortality by race for years 2005 to 2009. Of note is the increase in the rate of breast cancer mortality in African-American women during this time period which was 23.3 deaths per 100,000 women in 2005 compared to 40.3 deaths per 100,000 women in 2009. This overall increase compares to the slight decline in breast cancer mortality in white women from 23.8 deaths per 100,000 women in

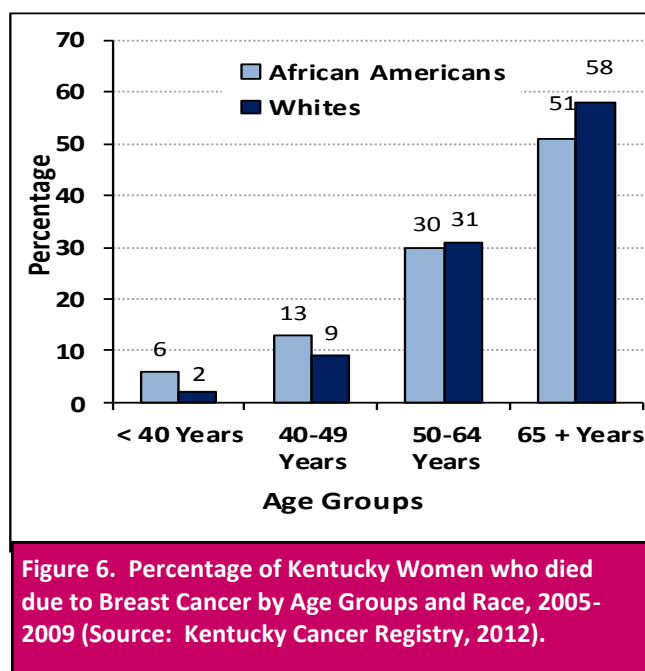


2005 to 22.3 deaths per 100,000 women in 2009.

The observed higher mortality among African American women may be the result of later detection of the disease among this demographic. In Kentucky from 2005 to 2009, 43% of breast cancer cases in African American women are found in the late stages versus 36% in white women. In previous years, African American women ages 50 to 64 years old have had a higher mortality rate compared to white women. The latest data available show the disparity is decreasing among this age group (Figure 6). However, there remains a need to continue outreach initiatives to assure access to services and to promote early detection and prompt

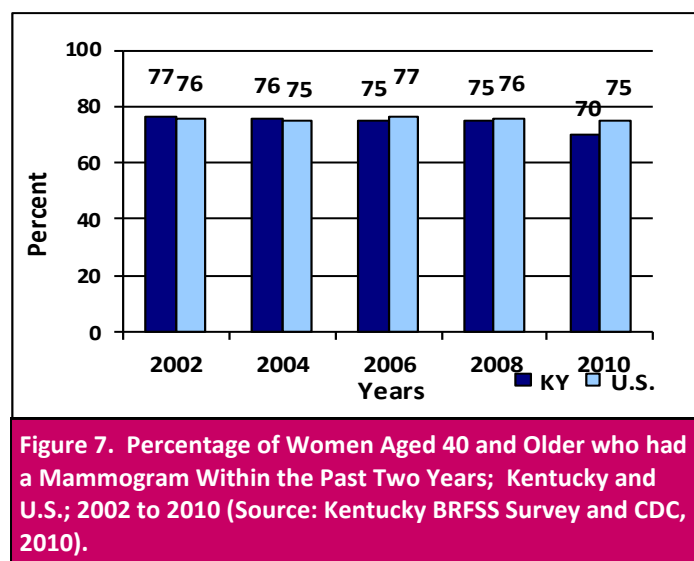
treatment after diagnosis.

Given the small number of Hispanic women in the general Kentucky population (3% in 2011),

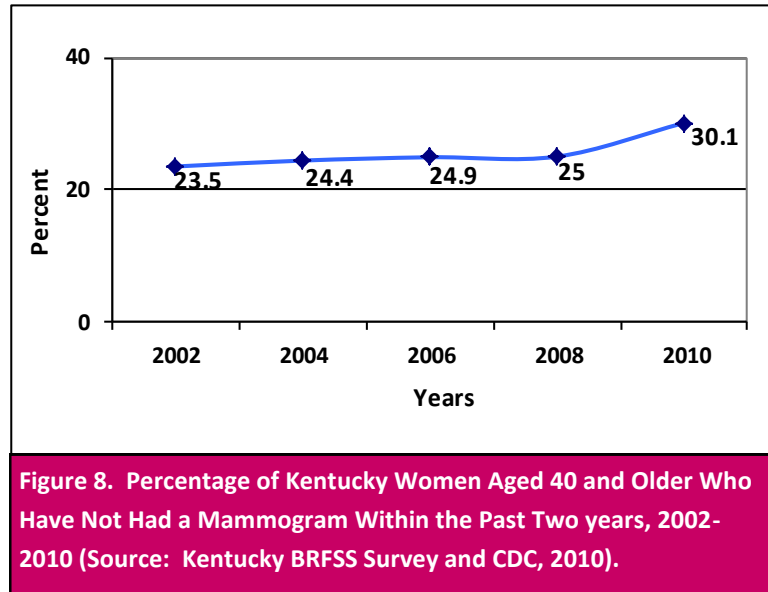


available data for breast cancer mortality among Hispanic women is not sufficient to support reliable inferences. The KWCSF continues to assess breast cancer mortality trends among this population.

Breast Cancer Screening



National screening guidelines endorsed by the CDC, American College of Obstetricians and Gynecologists (ACOG) and the ACS recommend that breast exams be provided for women beginning at age 21 and annual screening mammograms be provided for women beginning at age 40.



According to the Kentucky Behavioral Risk Factor Surveillance System Survey (BRFSS), Kentucky women aged 40 and older received screening mammograms at a consistent rate and at a rate similar to the U.S. rate (Figure 7).

Year 2010 saw a decline in screenings, signaling the need for clear, emphatic public education on the necessity of routine screenings. Three of every ten Kentucky women who need mammograms do not get them (Figure 8).

Many women not receiving routine mammograms live in medically underserved areas where screening is not readily available or affordable while others may not know the importance of regular screening. A special emphasis is placed on screening women who reside in the Appalachian region of Kentucky. In 2010 KWCSF's goal was to screen 6,290 Appalachian women ages 40-64, of which 5,844 (93%) were screened. In 2011 KWCSF's goal was to screen 6,538 Appalachian women in this age group, of which 6,407 (98%) were screened. Outreach efforts must continue until all women can access regular screenings, diagnosis, and treatment that will help eliminate the burden of breast cancer.

Kentucky Women's Cancer Screening Program

In 1990, in response to the issue of breast and cervical cancers, Senate Bill 41 established the KWCSPP to provide high quality breast and cervical cancer screening services at a low or reduced cost to women in all of Kentucky's 120 counties. In FY 2011, the KWCSPP received approximately \$2.4 million from state general funds, and LHDs contributed \$1.5 million through local tax dollars to support screening services. Since 1998, the program has been



able to provide screening and diagnostic services to more patients with the availability of approximately \$2.7 million from the CDC through the National Breast and Cervical Cancer Early Detection Program. The mission of the KWCSPP is carried out through preventive health programs at the LHDs. Women to be screened are seen initially in LHDs by registered nurses or other practitioners who provide instruction in breast self-examination and perform CBEs. In accordance with nationally recommended screening guidelines, annual CBEs are provided for patients beginning at age 21, and annual screening mammograms are provided for patients beginning at age 40. LHDs contract with local providers for screening mammograms and for follow-up diagnostic tests as clinically indicated.

Eligibility Criteria

The KWCSPP serves women who may not otherwise receive breast cancer screening services. These women are ages 21 to 64 years old, have a household income of 250% or less of the federal poverty guidelines, and are uninsured or underinsured. Women with household incomes below 100% of the poverty level receive services at a minimal cost. Women with household incomes between 100 and 250% of the poverty level are charged according to a sliding fee schedule. Women are never denied services due to an inability to pay.

Women receive breast cancer screening services appropriate to their age. Women 21 to 39 years of age receive CBEs and screening mammography services if they have been previously diagnosed with breast cancer, have had chest wall radiation, have an abnormal CBE, or have a family history of pre-menopausal breast cancer. Women 40 to 64 years old receive CBEs and annual mammograms. Women not meeting the eligibility criteria for services through the KWCSPP may be referred to other programs for cancer screening services.

Provision of Services

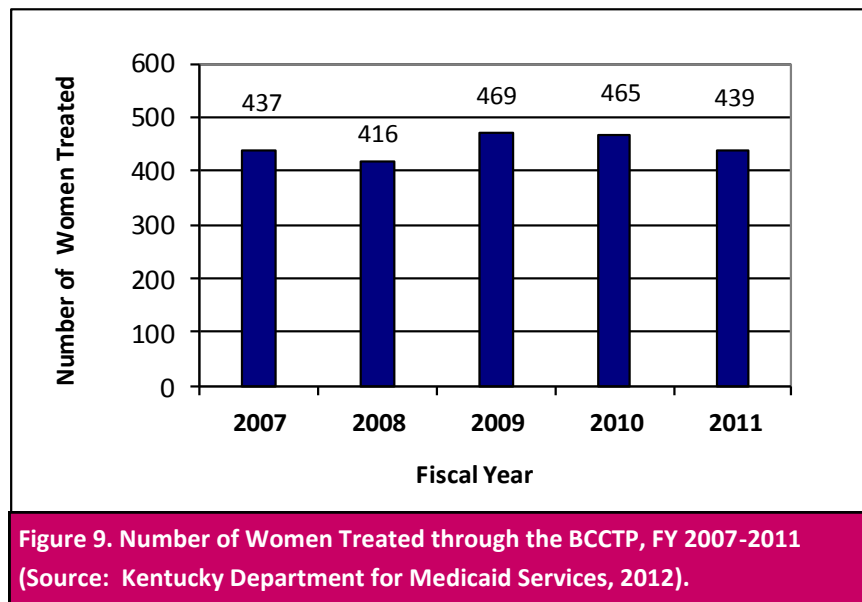
Breast cancer screening services are provided by a physician, nurse practitioner, or a specially trained registered nurse at a LHD or contracted healthcare provider. A cancer screening visit may include a health history, risk reduction counseling, a physical examination including a Pap test, a pelvic exam, a CBE, laboratory tests, and referral for an annual mammogram. Nurse case management is also provided for patient follow-up in the event of abnormal test results. Patients are encouraged to receive all services; however, the patient retains the right to refuse any part of the exam.

LHDs contract with local providers for mammograms and diagnostic tests. In counties where there is not a certified mammography facility or where an agreement cannot be established, a contract is established with a neighboring county or with a mobile mammography unit. There are approximately 159 mammography facilities available to LHD clients across the state. The KWCSF staff members provide technical assistance to LHDs to identify providers and assist with funding to ensure transportation for patients to attend their medical appointments.

LHD clients who receive abnormal breast cancer screening results are referred to providers for follow-up diagnostic services, including diagnostic mammography. For services for which no funds are available, or for services not covered by third party payers, LHDs negotiate with local providers to provide these services to patients at a minimal cost. The KWCSF assists with enrolling and initiating necessary referrals to the DMS BCCTP for the treatment of women with no health care coverage.

Breast and Cervical Cancer Treatment Program

On October 1, 2002, Breast and Cervical Cancer Treatment Funds became available for women who were screened for breast cancer through the KWCSF. Kentucky's DMS added coverage through special eligibility processes to enroll women who require treatment for breast or cervical cancer or precancerous conditions. Since 2002, the KWCSF has collaborated with the DMS to provide treatment to 3,764 women through the BCCTP. Without the availability of the screening and diagnostic services and the treatment referrals, these women might not have been diagnosed or received treatment for breast or cervical cancer or precancerous conditions (Figure 9).



Public Education and Outreach

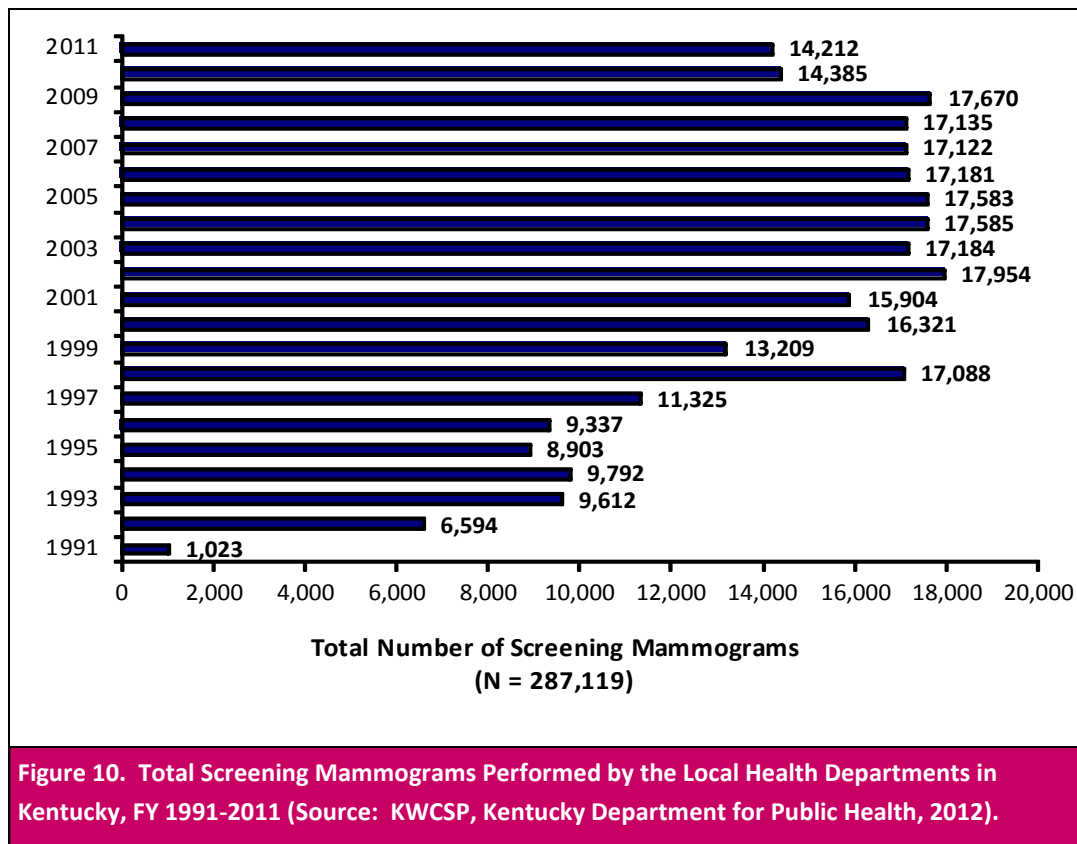
During FY 2011, the KWCSF made available funds to support local community coalitions for breast and cervical cancer. Community coalitions which received these funds (Table 1) implemented activities to increase awareness of the need for breast and cervical cancer screenings, targeting women who have never or have rarely been screened for breast or cervical cancer. Women who have never or are rarely screened for breast cancer are at risk for late detection of the disease, resulting in higher mortality rates. The KWCSF helped plan and support local community coalitions' outreach initiatives that included educational presentations, distribution of educational materials, health fairs, professional education and awareness, newspaper and radio articles, press releases, and public service announcements.

Table 1. Counties and Districts Receiving Coalition Support Funds, FY 2011			
BOURBON	FRANKLIN	LINCOLN	MONTGOMERY
BULLITT	GRAVES	MADISON	MUHLENBERG
CALLOWAY	JESSAMINE	MAGOFFIN	OLDHAM
ESTILL	KNOX	MARSHALL	POWELL
FAYETTE	LAUREL	MARTIN	TODD
FLEMING	LAWRENCE	MERCER	WHITLEY
FLOYD	LEWIS	MONROE	
DISTRICTS			
BARREN RIVER	KENTUCKY RIVER	NORTH CENTRAL	THREE RIVERS
CUMBERLAND VALLEY	LAKE CUMBERLAND	NORTHERN KENTUCKY	WEDCO
GATEWAY	LINCOLN TRAIL	PENNYRILE	
GREEN RIVER	LITTLE SANDY	PURCHASE	

Clinical Services Report

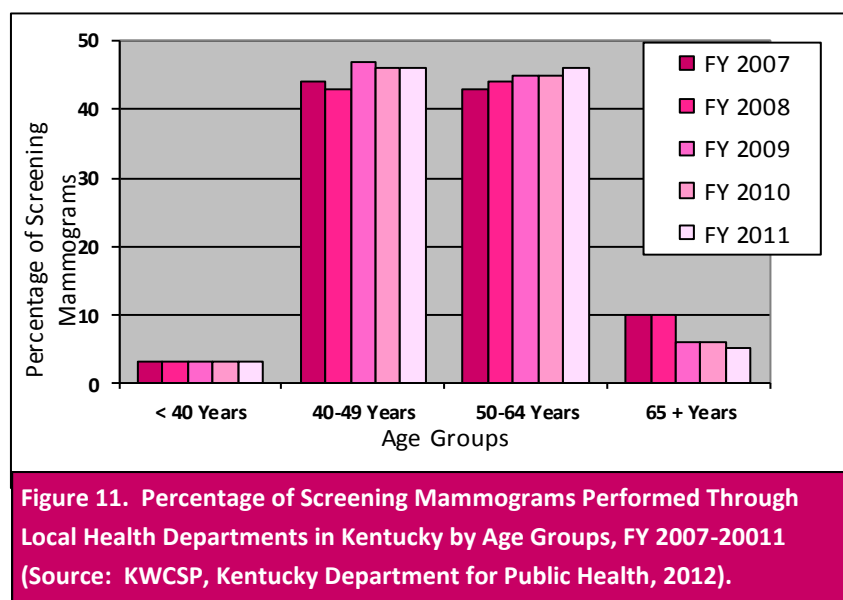
Screening Mammograms

Since 1991, a total of 287,119 screening mammograms have been performed through LHDs in Kentucky. A decrease in the number of screening mammograms performed by the LHDs in FY 2010 and FY 2011 can be partly attributed to improved data quality and correction of duplicated services reported by the LHDs staff. Kentucky's DPH staff provides trainings to LHD staff on the reporting of technical and professional components of a screening mammogram including Current Procedural Terminology (CPT) codes (Figure 10). Of those 14,212 screening mammograms provided in FY 2011, 11,404 were provided to KWCSF eligible women. The KWCSF has a screening rate of 20% of eligible women, a rate higher than the 19% screening rate for the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).



Throughout FY 2007 to 2011, the percentage of screening mammography among all age groups has remained relatively stable (Figure 11). In FY 2011, 97% of screening mammograms performed through LHDs were provided to women 40 years old and older. Of these women, 46% were ages 40-49; 46% were ages 50-64; and 5% were ages 65 and older. Results of several large studies indicate that screening mammograms reduce the number of deaths from breast

cancer for women over 40 years old, especially for women over 50 years old. Since guidelines do not recommend routine screenings for women younger than age 40, a lower percentage of screening mammograms for this age group is to be expected. However, women under 40 years old are provided mammograms at LHDs if they have symptoms or a family history of premenopausal breast cancer. Women 65 years and older who are eligible for Medicare may choose to obtain screening mammography services from private providers instead of the LHDs. This is the most likely explanation for the lower percentage of women 65 years and older who received screening mammograms through local health departments compared to other age groups.



In FY 2011, 86% of the state's female population was Non-Hispanic White; 8% Non-Hispanic African American; 3% others and unknown; and 3% Hispanic. Of the state's female population, the majority of screening mammograms (82%) were provided to Non-Hispanic White women. The remaining screening mammograms were divided among Non-Hispanic African Americans (11%); Hispanics (6%); and Others and Unknowns (1%), which includes Asians and American Indian women (Figure 12). Screening mammograms were provided to a higher proportion of African American women (11%) than are represented in the Kentucky population (8%) by the KWCSP, suggesting that outreach efforts by the KWCSP had a positive effect in the promotion of breast cancer screenings among African American women.

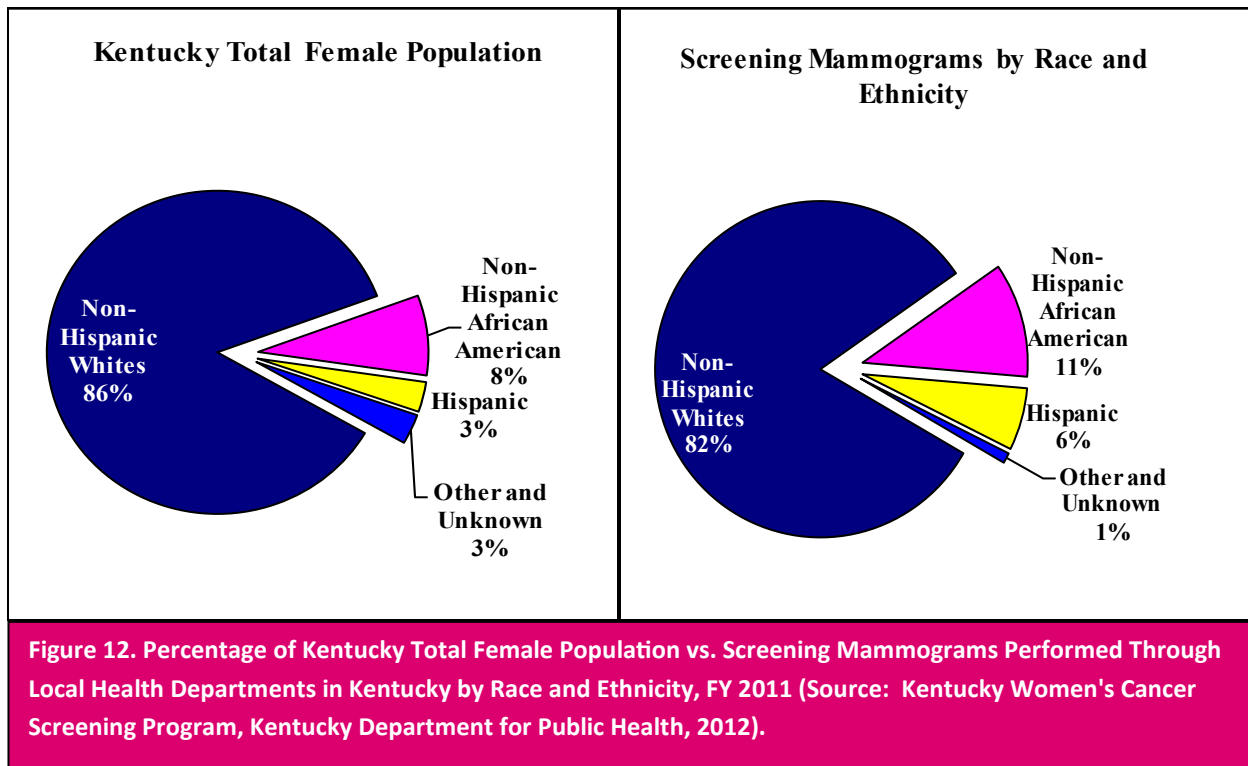


Table 2 shows the number of screening mammograms performed FY 2007-FY 2011 through LHDs in each of the 15 Area Development Districts (ADDs).

Area Development District	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
1. Barren River	908	783	930	878	779
2. Big Sandy	967	902	815	777	844
3. Bluegrass	2206	2040	2438	2498	2539
4. Buffalo Trace	287	213	256	252	252
5. Cumberland Valley	1782	1430	1563	1395	1352
6. FIVCO	932	783	746	645	591
7. Gateway	363	299	388	354	321
8. Green River	735	699	769	760	666
9. Kentucky River	1216	1260	1243	1174	1087
10. KIPDA	3527	4856	4131	1627	1793
11. Lake Cumberland	1161	1055	1313	1086	1018
12. Lincoln Trail	642	701	760	712	671
13. Northern Kentucky	341	285	427	377	401
14. Pennyriple	846	751	828	856	838
15. Purchase	1209	1078	1063	994	1060
Total	17,122	17,135	17,670	14,385	14,212

Outcomes

The LHDs detected 2,177 cases of breast cancer (invasive and pre-cancers) in women between FY 1991 through FY 2011. Sixty-three percent (1,372) of these breast cancer cases were detected during fiscal years 2002 to 2011 (Figure 13). In FY 2011, a total of 147 cases of breast cancer were detected through LHDs. Figure 13 shows an increase in the detection of breast cancers through the LHDs for FY 2002 through FY 2007 . Data for FY 2008-2011 is still preliminary and may change when the data is finalized. The program staff partnered with the KCR and the CDC to assure duplicate records were identified and corrected in the program's cancer database. The program staff utilized new software technologies to improve the accuracy of the data. Information for FY 1991-2001 is available upon request.

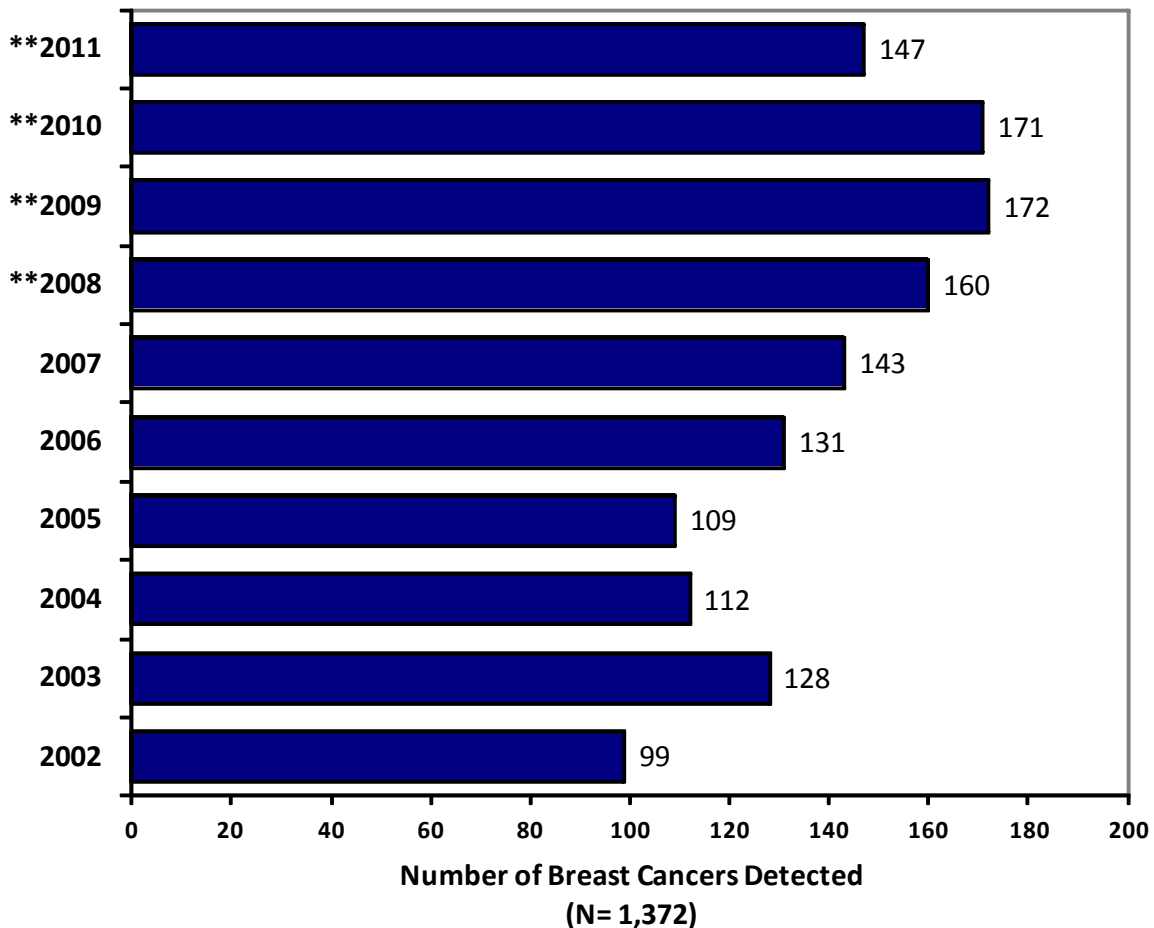


Figure 13. Total Number of Invasive Breast Cancers Diagnosed FY 2002-2011 (Source: Kentucky Cancer Registry and the Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2012).

**** Data for FY 2008-2011 are preliminary.**

Quality Assurance

Continuous quality assurance activities promote the quality of service delivery at LHDs, contracted providers, mammography facilities and laboratories. The KWCSF is required to submit reports twice each year to provide feedback to the CDC on performance indicators which measure the timeliness and appropriateness of care provided. The KWCSF is required to provide our patients a final diagnosis and treatment within the CDC's standard for quality of care. The CDC data analysis shows that the KWCSF patients meet the expected CDC standard for women who receive complete follow-up. The CDC uses the KWCSF program data to generate Kentucky's Data Quality Indicator Guide (DQIG). The FY 2011 performance report reveals the program met 68 of 70 indicators. These indicators represent important aspects of patient care. Eleven of these indicators compose the program's core performance; five of these indicators relate to breast cancer and six indicators relate to cervical cancer. Based on the FY 2011 CDC report on the KWCSF's 11 Core Performance Indicators, the program met or exceeded the CDC standards for quality of cancer services for the last six years (Table 3).

Table 3. Breast Cancer Quality of Care Core Program Performance Indicators Kentucky Women's Cancer Screening Program, FY 2011					
Program Performance Indicator	CDC Standard	Kentucky Results		National Results	
		Percentage	Standard Met?	Percentage	Standard Met?
Screening Mammograms Provided to Women > 50 years of age	≥ 75%	100.0% (4,965/4,965)	YES	86.8%	YES
Abnormal Breast Cancer Screening Results with Complete Follow-up	≥ 90%	90.5% (1,846/2,039)	YES	95.3%	YES
Abnormal Breast Cancer Screening Results; Time from Screening to Diagnosis > 60 Days	≤ 25%	6.3% (117/1,846)	YES	7.3%	YES
Treatment Started for Breast Cancer	≥ 90%	91.4% (64/70)	YES	97.5%	YES
Breast Cancer; Time from Diagnosis to Treatment > 60 days	≤ 20 %	6.3% (4/63)	YES	7.3%	YES

Clinical benchmarks developed and implemented to standardize the quality assurance review process correlate with standards established by the CDC's NBCCEDP. The quality assurance review process includes targeted activities to identify opportunities for program improvement and identify LHDs in need of further assessment or technical assistance.

In FY 2011, activities included routine quality assurance site visits at LHDs throughout

Kentucky. During a site visit, the state Case Management Coordinator (CMC) reviews the patient follow-up tracking system and external healthcare provider contracts. The CMC assesses LHD compliance with federal and state program guidelines and policies, as well as needs for training and technical assistance to assure the continuity of appropriate and timely quality care. The utilization of a standardized quality assurance tool during chart reviews assures that specific criteria and standards are being reviewed and consistently measured at each site. Any issues or concerns identified during the site visit are immediately addressed by the CMC with the LHD. All findings are also communicated to the LHD in writing within 14 days of the site visit. If applicable, a written plan of correction may be requested from the LHD and a follow-up review is conducted by the CMC to assure appropriate actions were taken to resolve issues.

In addition, protocols and practices are reviewed by the KWCSP Breast Cancer Medical Advisory Committee (BCMAC). Members of the BCMAC include radiologists, surgeons, and clinical pathologists. The BCMAC provide clinical expertise and advice regarding standards of care to promote quality services.

Clinical Standards

Clinical standards, including timetables for screening, diagnostic follow-up and case management, are established for the LHDs through the Public Health Practice Reference (PHPR). The PHPR guidelines are updated biannually and reflect current nationally recognized research and best practices. This reference contains the standards by which services are evaluated through routine and focused quality assurance activities. In accordance with nationally recommended screening guidelines, the PHPR guidelines for breast cancer screenings recommend that annual clinical breast exams be provided beginning at age 21 and annual screening mammograms be provided beginning at age 40. All women with an abnormal clinical breast examination, regardless of age, are referred for surgical consultation for further evaluation.

Case Management

The goal of case management is for all women enrolled in the KWCSP to receive accessible, timely, and medically appropriate screenings and referrals for diagnostic and treatment services. Each LHD is required to designate a Nurse Case Manager (NCM) to assure complete and timely tracking and follow-up for all women with abnormal screening and diagnostic test results. The NCM employs a patient tracking system to ensure women receive timely notification and referrals to providers for abnormal screening and diagnostic test results. Using a patient reminder tool, the NCM assists patients with case management services and follow-up services at appropriate screening intervals. Additionally, the NCM is responsible for the

development and implementation of an appropriate plan of care, coordination of patient care with providers, individualized patient counseling and education on test results and procedures, and ongoing review of the patient's plan of care to assure adherence to the current PPHR guidelines.

Professional Development

In collaboration with the KWCSF, the University of Louisville Professional Education Coordinator with the Kentucky Cancer Program (KCP) promoted four web-based training modules for Kentucky providers entitled, "Cancer Screening and Follow-up", "Using the Public Health Practice Reference", "Nurse Case Management, Helping Patients with Abnormal Results", and "Reaching Kentucky's Never and Rarely Screened". Since 2008, 825 users completed online continuing education modules on TRAIN. In FY 2011, the KCP provided three presentations to medical professional groups at regional and statewide meetings regarding the KWCSF and the BCCTP. In addition, KCP provided two Clinical Breast Examination Proficiency and Risk Management Training Courses for LHD personnel.

Data Monitoring

The NBCCEDP requires the KWCSF to collect an expanded data set that includes 100 data elements referred to as the Minimum Data Elements (MDEs). These data elements are collected from the LHDs in Kentucky to measure the effectiveness and efficiency of the program. These data elements are analyzed and areas of concern are addressed. MDEs are reported twice yearly to the CDC. CDC provides feedback to the program's performance after each data submission. The CDC reviews the program's data report to determine whether standards are met for NBCCEDP performance indicators. Continued quality assurance efforts have contributed to improvements in data management as well as the collection and reporting of data for services provided by the KWCSF.

Throughout FY 2011, the program continued efforts to streamline the data collection and reporting system to assure NBCCEDP performance indicators were met. The KWCSF implemented data management tools to review vendor data files. These tools were used to assess, on a monthly basis, the completeness, accuracy, and timeliness of the data reported in the data management vendor's file. As a result of this and other efforts, the KWCSF met 68 of 70 indicators and submitted 99.5% complete data to CDC in FY 2011.

Although changes to the data collection and reporting process have resulted in dramatic improvements in data timeliness and completeness, the program continues to address challenges in data management systems as identified through the program quality assurance monitoring. Quality assurance monitoring of LHD performance is accomplished through

analysis of data files and site visits to determine LHD needs for technical assistance and program performance improvements. Ongoing assessment is necessary to ensure completeness and accuracy of eligibility, clinical screening, and diagnostic service data, as well as quality of services and fiscal accountability.

Financial Progress Report

Funding Sources

The KWCSF is supported by state, federal, and local funds. The majority of the funds pay for clinical services for eligible women, including diagnostic follow-up tests. The remainder of the funds support administrative and infrastructure costs. These costs include program staff salaries, professional training programs for nurses and practitioners, outreach efforts and other program activities. The KWCSF staff provides oversight and monitors contracts with universities and memoranda of agreements with the LHDs that support cancer screening services, follow-up diagnostic tests, case management, local outreach projects, and community based staff. Local health departments supplement the funding for breast cancer screening services for women through local tax appropriations.

Financial Data (FY 2001 – 2011)

Table 4 reflects federal and state funds expended on breast and cervical cancer screening and follow-up for the past 10 years. Data prior to 2001 is available upon request.

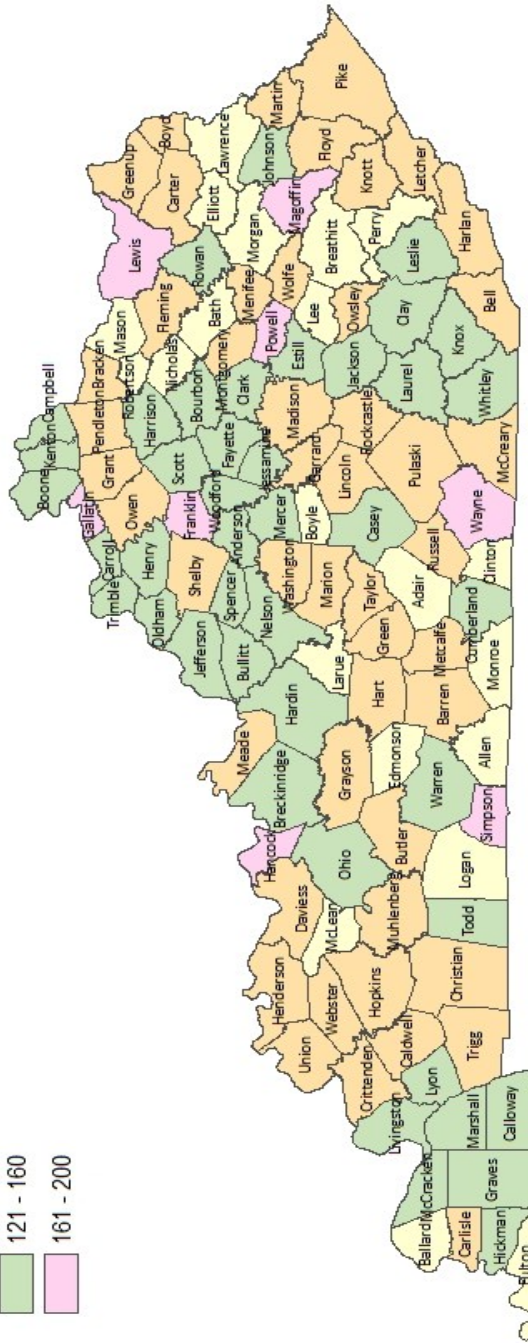
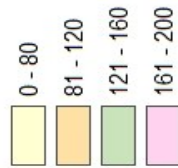
Each column of the table summarizes the expenses paid by the program in each fiscal year for clinical and non-clinical services. Clinical services include breast and cervical cancer screening office visits, screening tests, and diagnostic services. Non-clinical services include case management, data collection and processing, personnel, and outreach activities. The last column reflects the total of expenditures of these services/activities for each fiscal year. The average cost of breast cancer screening and diagnostic services, including those patients who received screening and diagnostic mammograms and clinical breast exams, was \$213.45 per woman.

Table 4. Federal and State Funds Expended on Breast and Cervical Cancer Screenings and Follow-up through Local Health Departments, FY 2001-2011											
	Federal						State				Total FY Allocation
FY	Allocation	Clinical Services	%	Non-clinical Costs	%	Allocation	Clinical Services	%	Non-clinical Costs	%	
2001	\$ 1,751,748	\$ 1,341,283	77	\$ 410,465.00	23	\$ 2,586,368	\$ 2,586,368	100	\$0		\$ 4,338,116.00
2002	\$ 1,861,038	\$ 1,363,731	73	\$ 497,307.00	27	\$ 2,600,000	\$ 2,600,000	100	\$0		\$ 4,461,038.00
2003	\$ 2,610,517	\$ 1,658,985	64	\$ 951,532.00	36	\$ 2,599,997	\$ 2,599,997	100	\$0		\$ 5,210,514.00
2004	\$ 2,516,239	\$ 1,871,745	74	\$ 644,494.00	26	\$ 2,544,953	\$ 2,544,953	100	\$0		\$ 5,061,192.00
2005	\$ 2,502,100	\$ 1,558,286	62	\$ 943,814.00	38	\$ 2,460,000	\$ 2,460,000	100	\$0		\$ 4,962,100.00
2006	\$ 2,377,223	\$ 1,610,754	68	\$ 766,469.00	32	\$ 2,577,758	\$ 2,577,758	100	\$0		\$ 4,954,981.00
2007	\$ 2,580,118	\$ 1,759,541	68	\$ 820,576.84	32	\$ 2,867,280	\$ 2,867,280	100	\$0		\$ 5,447,397.84
2008	\$ 2,329,409	\$ 1,767,540	76	\$ 561,869.00	24	\$ 2,936,362	\$ 2,756,504	94	\$179,858		\$ 5,265,770.89
2009	\$ 2,352,703	\$ 1,604,550	68	\$ 748,153.00	32	\$ 3,046,553	\$ 2,817,194	92	\$ 229,358.75	8	\$ 5,399,255.75
2010	\$ 2,329,409	\$ 1,603,600	69	\$ 725,809.00	31	\$ 2,484,597	\$ 2,331,291	94	\$ 153,305.91	6	\$ 4,814,005.91
2011	\$ 2,708,945	\$ 1,903,600	70	\$ 805,345.00	30	\$ 2,433,052	\$ 2,268,382	93	\$ 164,670.14	7	\$ 5,141,997.14
Total	\$25,919,449	\$ 18,043,615	70	\$7,875,833.84	30	\$ 29,136,920	\$ 28,409,727	98	\$ 727,193	2	\$55,056,368.53

APPENDIX A

Map 1. Invasive Breast Cancer Incidence Rates by County, Kentucky, 2008

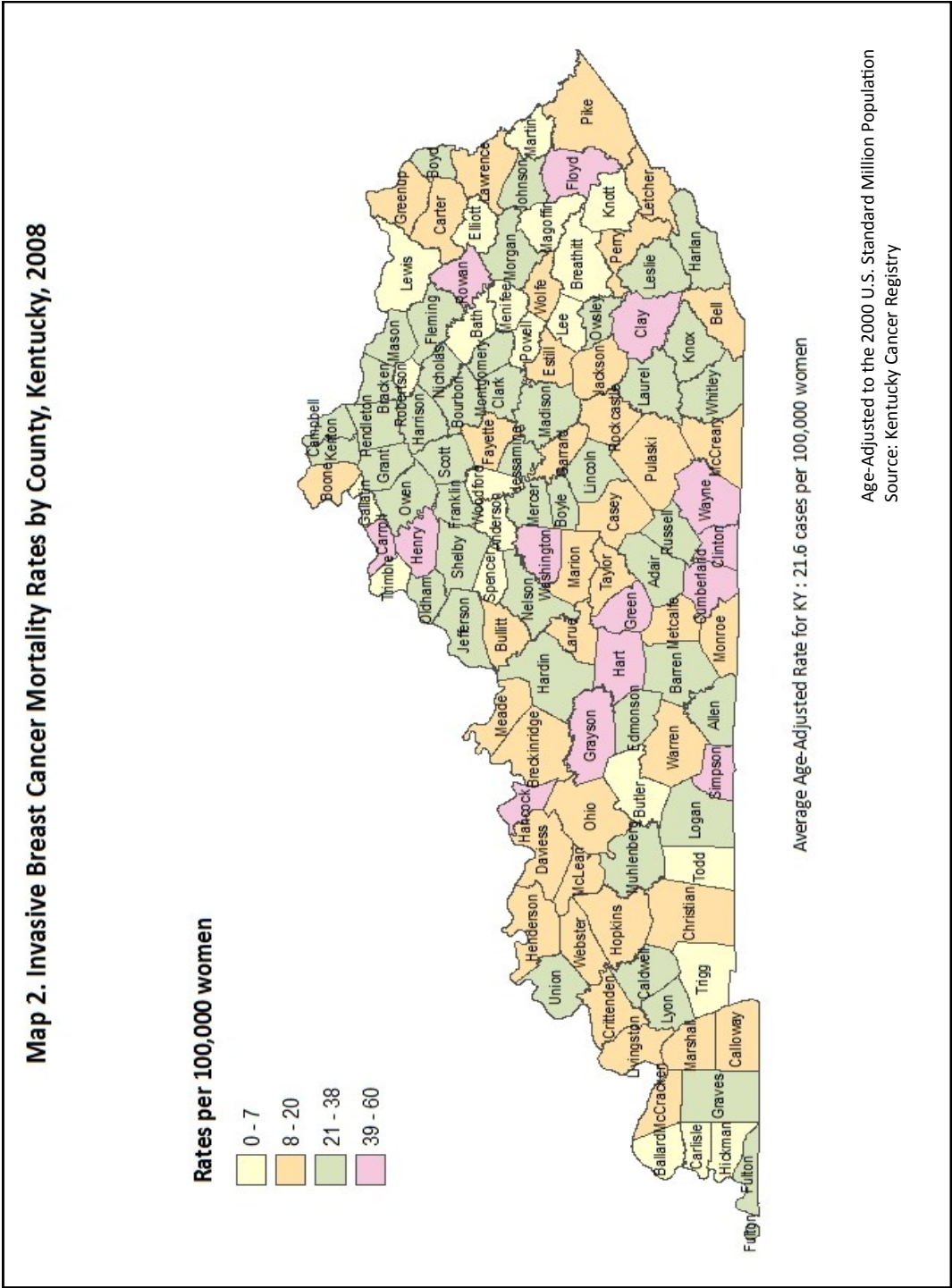
Rate per 100,000 women



Average Age-Adjusted Rate for KY : 121 cases per 100,000 women

Age-Adjusted to the 2000 U.S. Standard Million Population
Source: Kentucky Cancer Registry

APPENDIX B



APPENDIX C

Glossary

Age-Adjusted: A weighted average of the age-specific or crude rates, where weights are the proportions of persons in the corresponding age groups of a standard million population.

Benign: A condition that is not cancerous.

Biopsy: A procedure to obtain a small amount of tissue for microscopic analysis to establish a precise diagnosis.

Breast Carcinoma, In Situ: An early form of breast cancer characterized by absence of invasion of surrounding breast tissues, with no spreading of cancer cells beyond the milk ducts or milk-producing glands.

Breast Carcinoma, Invasive: A form of breast cancer characterized by the invasion of surrounding breast tissue, with spreading of cancer cells beyond the milk ducts or milk glands.

Breast Cancer Rates: Calculations are based on invasive breast cancers.

Incidence: Rate of new cancers of a specific site/type occurring in a specified population during a year, expressed as the number of cancers per 100,000 people.

Malignant: The medical term for cancer, referring to the abnormal division of cells which can spread through the body.

Mammogram: A form of breast x-ray used to detect breast cancer.

Mammogram, Screening: Two x-ray views of each breast typically used when a physical exam shows no signs or symptoms of breast cancer.

Mammogram, Diagnostic: Two or more x-ray views of one or both breasts, typically used when a physical exam or screening mammogram shows signs or symptoms of breast cancer.

Payer: Agency responsible for paying for services performed through Local Health Departments; includes The Kentucky Women's Cancer Screening Program, Medicaid, Medicare, commercial insurance, and the client herself (self-pay).

Prevalence: Total number of people with a specific site/type of cancer at a particular moment in time in the entire population.

Ultrasound, Breast: An imaging procedure using high-frequency sound waves to create an image of a change in breast tissue.

APPENDIX D

Kentucky Statutes and Administrative Regulations

1. Kentucky Women's Cancer Screening Program

KRS 214.550 Definitions for KRS 214.552 to 214.556.

As used in KRS 214.552 to 214.556:

- (1) "Department" means the Department for Public Health of the Cabinet for Health and Family Services.
- (2) "Fund" means the breast cancer screening fund.
- (3) "Screening" means the conduct of screening mammography for the purpose of ascertaining the existence of any physiological abnormality which might be indicative of the presence of disease.

Effective: June 20, 2005

History: Amended 2005 Ky. Acts ch. 99, sec. 461, effective June 20, 2005. -- Amended 1998 Ky. Acts ch. 426, sec. 408, effective July 15, 1998. -- Amended 1994 Ky. Acts ch. 184, sec. 1, effective July 15, 1994. -- Created 1990 Ky. Acts ch. 318, sec. 2, effective July 1, 1990.

KRS 214.554 Breast Cancer Screening Program -- Breast Cancer Advisory Committee -- Annual report.

- (1) There is established within the department a Breast Cancer Screening Program for the purposes of:
 - (a) Reducing morbidity and mortality from breast cancer in women through early detection and treatment; and
 - (b) Making breast cancer screening services of high quality and reasonable cost available to women of all income levels throughout the Commonwealth and to women whose economic circumstances or geographic location limits access to breast cancer screening facilities.
- (2) Services provided under the Breast Cancer Screening Program may be undertaken by private contract for services or operated by the department and may include the purchase, maintenance, and staffing of a truck, a van, or any other vehicle suitably equipped to perform breast cancer screening. The program may also provide referral services for the benefit of women for whom further examination or treatment is indicated by the breast cancer screening.
- (3) The department may adopt a schedule of income-based fees to be charged for the breast cancer screening. The schedule shall be determined to make screening available to the largest possible number of women throughout the Commonwealth. The department shall, where practical, collect any available insurance proceeds or other reimbursement payable on behalf of any recipient of a breast cancer screening under KRS 214.552 to 214.556 and may adjust the schedule of fees to reflect insurance contributions. All fees collected shall be credited to the fund.
- (4) The department may accept any grant or award of funds from the federal government or private sources for carrying out the provisions of KRS 214.552 to 214.556.
- (5) For the purpose of developing and monitoring the implementation of guidelines for access to and the quality of the services of the Breast Cancer Screening Program, there is hereby created a Breast Cancer Advisory Committee to the commissioner of the Department for Public Health which shall include the directors of the James Graham Brown Cancer Center and the Lucille Parker Markey Cancer Center, the director of the Kentucky Cancer Registry, the director of the Division of Women's Physical and Mental Health, one (1) radiologist with preference given to one who has been fellowship-trained in breast diagnostics and who shall be appointed by the Governor, one (1) representative of the Kentucky Office of Rural Health appointed by the Governor, one (1) repre-

sentative of the Kentucky Commission on Women appointed by the Governor, and at least three (3) women who have had breast cancer and who shall be appointed by the Governor.

(6) The commissioner of the Department for Public Health, in consultation with the Breast Cancer Advisory Committee, shall annually, but no later than November 1 of each year, make a report to the Governor, the Legislative Research Commission, and the Interim Joint Committees on Appropriations and Revenue and on Health and Welfare on the: (a) Implementation and outcome from the Breast Cancer Screening Program including, by geographic region, numbers of persons screened, numbers of cancers detected, referrals for treatment, and reductions in breast cancer morbidity and mortality;

(b) Development of quality assurance guidelines, including timetables, for breast cancer screening under this section, and monitoring of the manner and effect of implementation of those guidelines; and

(c) Funds appropriated, received, and spent for breast cancer control by fiscal year.

Effective: June 20, 2005

History: Amended 2005 Ky. Acts ch. 99, sec. 462, effective June 20, 2005. -- Amended 2003 Ky. Acts ch. 48, sec. 1, effective June 24, 2003. -- Amended 1998 Ky. Acts ch. 95, sec. 1, effective July 15, 1998; and ch. 426, sec. 409, effective July 15, 1998. -- Amended 1994 Ky. Acts ch. 184, sec. 2, effective

2. Breast and Cervical Cancer Treatment Program

907 KAR 1:805. Breast and cervical cancer eligibility for Medicaid.

RELATES TO: 42 U.S.C. 1396a(aa)

STATUTORY AUTHORITY: KRS 194A.030(2), 194A.050(1), 205.520(3), EO 2004-726

NECESSITY, FUNCTION, AND CONFORMITY: EO 2004-726, effective July 9, 2004, reorganized the Cabinet for Health Services and placed the Department for Medicaid Services and the Medicaid Program under the Cabinet for Health and Family Services. The Cabinet for Health and Family Services, Department for Medicaid Services, has responsibility to administer the Medicaid Program. KRS 205.520(3) authorizes the cabinet, by administrative regulation, to comply with any requirement that may be imposed, or opportunity presented, by federal law for the provision of medical assistance to Kentucky's indigent citizenry. This administrative regulation establishes the requirements for the determination of Medicaid eligibility for low-income, uninsured women under the age of sixty-five (65) who have been identified by the Kentucky Women's Cancer Screening Program and are in need of treatment for breast or cervical cancer, including a precancerous condition and early stage cancer.

Section 1. Definitions. (1) "Cabinet" means the Cabinet for Health and Family Services.

(2) "CDC" means the federal Centers for Disease Control and Prevention.

(3) "Creditable coverage" is defined in KRS 304.17A-005(7).

(4) "Department" means the Department for Medicaid Services or its designated agent.

(5) "Kentucky Women's Cancer Screening Program" means the program administered by the Department for Public Health which provides breast and cervical cancer screening and diagnostic services to low-income, uninsured or underinsured women using both state funds and monies from the Centers for Disease Control and Prevention's National Breast and Cervical Cancer Early Detection Program, including Title XV funds.

(6) "Qualified alien" means an alien who, at the time the alien applies for or receives Medicaid, meets the requirements established in 907 KAR 1:011, Section 5(12)(a)1b or c.

Section 2. Eligibility Criteria. A woman shall be eligible for Medicaid benefits if she:

(1) Has not attained the age of sixty-five (65);

(2) Is a United States citizen or qualified alien;

(3) Is a resident of Kentucky;

(4) Is not an individual described in any of the mandatory Medicaid categorically-needy eligibility groups;

(5) Is not a resident of a public institution in accordance with 907 KAR 1:011, Section 6;

(6) Has been:

(a) Screened for breast or cervical cancer under the Kentucky Women's Cancer Screening Program; and

(b) Found to need treatment for breast or cervical cancer, including a precancerous condition or early stage cancer;

(7) Does not have creditable coverage unless the treatment of breast or cervical cancer is not:

(a) A covered service; or

(b) Covered due to:

1. Exclusion as a preexisting condition;

2. An HMO affiliation period; or

3. Exhaustion of a lifetime limit on benefits; and

(8) Has provided a Social Security number in accordance with 907 KAR 1:011, Section 11.

Section 3. Limitation. A woman who is determined to require routine monitoring services for a precancerous breast or cervical condition shall not be considered to need treatment.

Section 4. Eligibility Period. (1) Medicaid eligibility may be effective three (3) months prior to the month of application.

(2) The length of Medicaid eligibility shall be as follows:

(a) Four (4) months for the treatment of breast cancer;

(b) Three (3) months for the treatment of cervical cancer; and

(c) Two (2) months for the treatment of precancerous cervical or breast disorder.

(3)(a) The department may grant an extension of eligibility if further treatment is necessary for breast or cervical cancer or a precancerous cervical or breast disorder.

(b) To request an extension, the treating provider shall complete a MAP-813D, Breast and Cervical Cancer Treatment Program Request for Extension of Eligibility, and submit it to the department.

(c) After receipt of the completed MAP-813D, the department shall notify the recipient of the eligibility extension period.

(4) If the age of sixty-five (65) is attained during an eligible period, Medicaid eligibility shall be terminated at the end of the birth month.

Section 5. Department for Public Health Responsibilities. A local health department shall:

(1) In a joint effort with an applicant, complete a MAP-813B, BCCTP Eligibility Screening Form, to determine if the recipient is potentially eligible for Medicaid in another eligibility category;

(2) Refer the applicant to the local Department for Community Based Services office if she is potentially eligible in another Medicaid group;

(3) If the applicant is determined to meet the eligibility criteria established in Section 2 of this administrative regulation:

(a) In conjunction with the applicant, complete a MAP-813, Breast and Cervical Cancer Treatment Program Application; and

(b) Contact the department to obtain an authorization number; and

(4) If an authorization number is received, provide the applicant's eligibility information to the department.

Section 6. Recipient Responsibilities. The recipient shall be responsible for reporting to the department within ten (10) days a change in:

(1) Breast or cervical cancer treatment status;

(2) Creditable health insurance coverage;

(3) Address; or

(4) Another circumstance which may affect eligibility.

Section 7. Appeal Rights. (1) An appeal regarding the Medicaid eligibility of an individual shall be conducted in accordance with 907 KAR 1:560.

(2) If a woman is determined ineligible for the Kentucky Women's Cancer Screening Program, the appeal procedures shall be in accordance with 902 KAR 1:400.

Section 8. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "MAP-813B, BCCTP Eligibility Screening Form, September 9, 2002 edition," Department for Medicaid Services;

(b) "MAP-813, Breast and Cervical Cancer Treatment Program Application, January 15, 2003 edition," Department for Medicaid Services; and

(c) "MAP-813D, Breast and Cervical Cancer Treatment Program Request for Extension of Eligibility, January 15, 2003 edition," Department for Medicaid Services.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Department for Medicaid Services, 275 East Main Street, Frankfort, Kentucky 40621, Monday through Friday, 8 a.m. through 4:30 p.m. (30 Ky.R. 181; eff. 8-20-2003.)